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[2207/12121] JFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	: Examiner: Akash Saxena
Eric M. MONROE	:
For: TECHNIQUE FOR DEFINING PROBABILISTIC RELIABILITY TEST REQUIREMENTS	:
Filed: October 17, 2001	:
Serial No.: 09/982,061	:

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop APPEAL BRIEF - PATENTS Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

Date: 6/18/2007

Signature: _____

AARON C. DEDITCH (33,865)

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF TRANSMITTAL PURSUANT TO 37 C.F.R. § 41.41

SIR:

Accompanying this Reply Brief Transmittal is a Second Reply Brief (in reply to the Second Answer) pursuant to 37 C.F.R. § 41.41 for filing in the above-identified patent application, together with two courtesy copies thereof. The two-month response date is June 18, 2007 (since June 16, 2007 was a Saturday), since the Second Answer was filed on April 16, 2007.

While no fee is believed to be due, the Commissioner is authorized to charge, as necessary and/or appropriate, any fees (including any extension fees) or credit any overpayment to Deposit Account No. **11-0600**. A duplicate copy of this transmittal letter is enclosed for that purpose.

Respectfully submitted,

Dated: 6/18/2007

By: _____
Gerard A. Messina
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[2207/12121]

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Second REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

SIR:

Appellant submits the present Reply Brief (the two-month response date for which is June 18, 2007 (since June 16, 2007 was a Saturday)) in response to the Examiner's *SECOND* Answer mailed on April 16, 2007 ("the Answer"). Although not required, two duplicate copies of this Reply Brief are also being submitted herewith as a courtesy to the Patent Office. It is understood that the Second Answer was only filed to list the Evidence Relied Upon by the Examiner in Section (8), and is otherwise substantively the same. Accordingly, this Reply Brief is being refiled as a cautionary matter to reply to the Second Answer.

Regarding the **STATUS OF AMENDMENTS** Section, it is noted and understood that all amendments have been entered to date.

For the reasons set forth in the Appeal Brief and those set forth below, it is again respectfully submitted that the final rejections of claims 1 to 22 should be reversed.

REMARKS

The following is submitted as regards the Second Answer of March 16, 2007:

A. Rejection of claims 1 to 5 and 16 as unpatentable under 35 U.S.C. § 103(a) over "Mencinger" in view of "Doty"

Claims 1 to 5

Claims 1 to 5 and 16 were finally rejected under 35 U.S.C. § 103(a) as being obvious over "Intel Technology Journal Q3" by Nicholas P. Mencinger et al. ("Mencinger") in view of "Application Specific Semiconductor Device Qualification Methodology" by M. Doty ("Doty").

As explained in the Appeal Brief, Mencinger and Doty, whether taken alone or combined, do not disclose or even suggest the features of claims 1 and 4 as to the feature of determining the accelerated life test requirements that represent each of the plurality of "different types of temperature cycles fluctuations a package/device is expected to undergo over a product lifetime, or incorporating into an accelerated life model quantified expected frequencies and magnitudes of temperature fluctuations of the package/chip device in each of a plurality of temperature regimes over the product lifetime." Moreover, as also explained in the Appeal Brief, there is no motivation to combine Mencinger and Doty, as conclusorily asserted by the Office Actions to date, nor is there any motivation to modify the mechanism-based methodology referred to in Mencinger, in the manner contemplated by claims 1 and 4.

Essentially, the Answer again asserts that claims 1 and 4 are indefinite as to "each of a plurality of different types of temperature cycles", or that, alternatively, Mencinger and Doty disclose such features.

As to the indefiniteness assertion, curiously late and improperly presented, the Answer now seeks to rely on further and new grounds of rejection -- not previously relied upon and/or argued by the Examiner to date. It is respectfully submitted that the indefiniteness assertion does not cure the critical deficiencies of the original obviousness assertions of the Office, but to the extent that new grounds of rejection are to be considered, the case should first be remanded for further examination so that the Appellants may have a full and fair opportunity to assess the accuracy of and respond to these wholly new

assertions. Indeed, any such new grounds of rejection must have been raised, if at all, during examination.

As to the assertion that Mencinger in view of Doty discloses the feature in which "each of a plurality of different types of temperature cycles", the Office has again conveniently focused only on a limited subset of the recited claim features – ignoring certain other related recited features. In particular, the Answer conveniently and wholly ignores the fact that claim 1, for example, includes the complete feature of "*determining accelerated life test requirements that represent* each of a plurality of different types of temperature cycle *fluctuations a package/device is expected to undergo over a product lifetime*" (emphasis added to show features ignored and not addressed to date) . Here, the Answer cites to and relies upon unrelated portions of both Mencinger and Doty as evidence of the different types of temperature cycle fluctuations these references allegedly disclose-- but none of the cited portions of Menciger and Doty discuss the alleged different types of temperature cycle fluctuations in the context of determining accelerated life test requirements, as provided for in the context of the claims.

Indeed, the Answer specifically admits on page 4 that "Mencinger does not disclose accelerated life tests requirements for other situations". Accordingly, simply citing to alleged different types of temperature cycle fluctuations, as is done by the Answer, is no more than a piecemeal attempt to find support -- where none exists -- in the references cited, which ignores the context and the particulars of the whole of the recited features of the claims, and thus ignores the features the claims as they are presented.

Accordingly, it is respectfully submitted that claims 1 to 5 are allowable for these further reasons.

Claim 16

Claim 16 was finally rejected under 35 U.S.C. § 103(a) as being obvious over Mencinger in view of the Doty reference.

As explained in the Appeal Brief, Mencinger and Doty, whether taken alone or combined, do not disclose or even suggest the features of claim 16, including the feature of

quantifying frequencies and magnitudes of temperature fluctuations based in part on the shipping route taken by the product.

The Answer conclusorily asserts on page 24 that "Doty teaches seasonal fluctuations based on the shipping routes taken" -- yet nowhere in Doty is shipping or a shipping route even discussed as to seasonal fluctuations. Instead, Doty simply provides a seasonal temperature variation chart for winter, spring, summer and fall with daily fluctuations superimposed thereon. Accordingly, the assertion by the Answer that the seasonal temperature fluctuation chart of Doty is based on the shipping route is simply wrong.

Accordingly, it is respectfully submitted that claim 16 is allowable for these further reasons.

B. Rejection of Claims 6 to 12, 14 and 17 to 22 as unpatentable under 35 U.S.C. § 103(a) over "Mencinger" in view of "Doty" and in further view of "Reliasoft"

Claims 6 to 12, 14 and 17 to 22

Claims 6 to 12, 14 and 17 to 22 were finally rejected under 35 U.S.C. § 103(a) as being obvious over Mencinger in view of Doty, and in further view of Reliasoft.

As explained in the Appeal Brief, the ReliaSoft reference does not cure the critical deficiencies of the Mencinger and Doty references as to claims 1, 4 and 16, from which claims 6 to 12, 14 and 17 to 22 either ultimately depend, or which include features that are essentially analogous. Moreover, the Mencinger and Doty references are not properly combinable with the ReliaSoft reference since there exists no motivation as to any of the references to combine them.

While the Answer asserts that express motivation in any of the references is not required, but instead may be reasoned from knowledge generally available to one of ordinary skill in the art and established scientific principles, the Answer conveniently fails to identify the relevant persons skilled in the art, and it does not discuss in any objective sense what knowledge those skilled in the art must possess. Instead, the Answer relies on the knowledge of the Examiner himself. Indeed, as stated in the Appeal Brief, the assertion by the Office that the Coffin Manson empirical model is a mere equivalent of any Inverse Power

Law model is a drastic over-simplification of the technical subject matter described, and thus establishes that the Examiner is not for these purposes a skilled artisan.

Therefore, the references as applied do not render unpatentable claims 6 to 12, 14, and 17 to 22

Accordingly, it is respectfully submitted that claims 6 to 12, 14 and 17 to 22 are allowable for these further reasons.

C. Rejections of Claims 13 and 15 as unpatentable under 35 U.S.C. § 103(a) over "Mencinger" in view of "Doty", and further in view of "ReliaSoft" and "Dellin"

Claims 13 and 15

Claims 13 and 15 were finally rejected under 35 U.S.C. § 103(a) as being obvious over Mencinger in view of Doty, and further in view of ReliaSoft and Dellin.

As explained in the Appeal Brief, the ReliaSoft and Dellin references do not cure the critical deficiencies of the Mencinger and Doty references, and moreover, the assertion by the Office that it would have been obvious "to take the Coffin Manson model as described in Dellin and use it with the teachings of Mencinger, Doty and [ReliaSoft] ***to make it more functionally useful***" (emphasis added) is mere hindsight reasoning and fails to demonstrate a requisite motivation to modify the Mencinger reference to provide the claimed features, which the Office admits is not disclosed by Mencinger.

The Answer asserts that the motivation comes from Mencinger, as it allegedly refers to industry accepted stress models by Dellin on page 2, col. 2, lines 21 to 25, and page 4, col. 2, lines 13 to 18. However, such portions of Mencinger merely state the stress models listed in Table 3 *of the Mencinger reference* were previously published in a white paper by Sematech. Whether the Dellin reference is the Sematech white paper referred to by Mencinger has not been established, and indeed is irrelevant since Table 3 of the Mencinger reference lists the recommended Coffin-Manson model to be incorporated into the Mencinger methodology. As can be seen in Table 3, this recommended Coffin-Manson is unmodified.

Therefore, the references as applied do not render unpatentable claims 13 and 15.

Accordingly, it is respectfully submitted that claims 13 and 15 are allowable for these further reasons.

In sum claims 1 to 22 are allowable.

CONCLUSION

In view of the above, it is respectfully requested that the rejections of claims 1 to 22 be reversed, and that these claims be allowed as presented.

Respectfully submitted,

Dated: 6/18/2007

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